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Appl. No.: 09/913,377
Response dated June 13, 2005
Reply to Office action of January 13, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 9 (Previously Presented): A process for preparing phytosterols, said process comprising:

(a) providing a liquid phytosterol starting material obtained by transesterification of a distillation residue with an alkanol;

(b) dissolving the liquid phytosterol starting material in a hydrocarbon solvent; and

(c) crystallizing a phytosterol product, wherein the phytosterol product is substantially citrostadienol-free.

Claim 10 (Previously Presented): The process according to claim 9, wherein the distillation residue comprises a deodorizer condensate obtained from fatty acid methyl ester production.

Claim 11 (Previously Presented): The process according to claim 10, wherein the deodorizer condensate is derived from an oil selected from the group consisting of rapeseed oil and sunflower oil.

Claim 12 (Previously Presented): The process according to claim 11, wherein the oil comprises sunflower oil.

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Claim 13 (Previously Presented): The process according to claim 9, wherein the distillation residue comprises tall oil pitch.

Claim 14 (Previously Presented): The process according to claim 9, wherein the alkanol comprises methanol.

Claim 15 (Previously Presented): The process according to claim 11, wherein the alkanol comprises methanol.

Claim 16 (Previously Presented): The process according to claim 9, wherein the liquid phytosterol starting material is maintained at a temperature of from 60°C to 80°C prior to and during dissolution in the hydrocarbon solvent.

Claim 17 (Previously Presented): The process according to claim 11, wherein the liquid phytosterol starting material is maintained at a temperature of from 60°C to 80°C prior to and during dissolution in the hydrocarbon solvent.

Claim 18 (Previously Presented): The process according to claim 16, wherein the liquid phytosterol starting material is maintained at a temperature of from 65°C to 70°C.

Claim 19 (Previously Presented): The process according to claim 17, wherein the liquid phytosterol starting material is maintained at a temperature of from 65°C to 70°C.

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Claim 20 (Previously Presented): The process according to claim 9, wherein the hydrocarbon solvent comprises a linear or branched alkane isomer selected from the group consisting of pentane, hexane, heptane, octane, nonane, decane, and mixtures thereof.

Claim 21 (Previously Presented): The process according to claim 9, wherein the hydrocarbon solvent comprises a linear or branched alkane isomer selected from the group consisting of hexane, heptane, and mixtures thereof.

Claim 22 (Previously Presented): The process according to claim 9, wherein methanol is combined with the hydrocarbon solvent prior to crystallization.

Claim 23 (Previously Presented): The process according to claim 22, wherein the methanol is present in an amount of from 1 to 15 % by weight, based on the hydrocarbon solvent.

Claim 24 (Previously Presented): The process according to claim 11, wherein methanol is combined with the hydrocarbon solvent prior to crystallization.

Claim 25 (Previously Presented): The process according to claim 24, wherein the methanol is present in an amount of from 1 to 15 % by weight, based on the hydrocarbon solvent.

Claim 26 (Previously Presented): The process according to claim 16,

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wherein methanol is combined with the hydrocarbon solvent prior to crystallization.

Claim 27 (Previously Presented): The process according to claim 26, wherein the methanol is present in an amount of from 1 to 15 % by weight, based on the hydrocarbon solvent.

Claim 28 (Previously Presented): The process according to claim 9, wherein crystallizing the phytosterol product comprises cooling the liquid phytosterol starting material in the hydrocarbon solvent to a temperature of below about 30°C.

Claim 29 (Previously Presented): The process according to claim 9, wherein crystallizing the phytosterol product comprises cooling the liquid phytosterol starting material in the hydrocarbon solvent to a temperature of from about 25°C to about 30°C.

Claim 30 (Previously Presented): The process according to claim 11, wherein crystallizing the phytosterol product comprises cooling the liquid phytosterol starting material in the hydrocarbon solvent to a temperature of below about 30°C.

Claim 31 (Previously Presented): The process according to claim 11, wherein crystallizing the phytosterol product comprises cooling the liquid phytosterol starting material in the hydrocarbon solvent to a temperature of from about 25°C to about 30°C.

Claim 32 (Previously Presented): The process according to claim 9,

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wherein the phytosterol product has a citrostadienol content of less than 0.5% by weight.

Claim 33 (Previously Presented) The process according to claim 9, wherein the phytosterol product has a citrostadienol content of less than 0.2% by weight.

Claim 34 (Previously Presented): A process for preparing phytosterols, said process comprising:

(a) providing a liquid phytosterol starting material obtained by transesterification of a distillation residue with methanol, wherein the distillation residue comprises a deodorizer condensate derived from sunflower oil;

(b) dissolving the liquid phytosterol starting material in a hydrocarbon solvent, the hydrocarbon solvent comprising a linear or branched alkane isomer selected from the group consisting of hexane, heptane, and mixtures thereof, wherein the liquid phytosterol starting material is maintained at a temperature of from 60°C to 80°C prior to and during dissolution in the hydrocarbon solvent; and

(c) crystallizing a phytosterol product via cooling the liquid phytosterol starting material in the hydrocarbon solvent to a temperature of below about 30°C, wherein methanol is combined with the hydrocarbon solvent prior to crystallization in an amount of from 1 to 15 % by weight, based on the hydrocarbon solvent, and wherein the phytosterol product has a citrostadienol content of less than 0.5% by weight..

Claim 35 (Canceled).

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Claim 36 (Canceled).

Claim 37 (Canceled).